

# Environmental Resources Management, Inc.

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10 May 1991

Mr. Eugene Dennis  
Remedial Project Manager  
US Environmental Protection Agency  
Region III  
841 Chestnut Street  
Philadelphia, PA 19107

FILE: 723-01-03

RE: Textron/ERM Presentation to PADER/EPA, 25 April 1991

Dear Mr. Dennis:

As you requested, we are providing you with the attached summary of our recent presentation to your staff and PADER. This presentation was part of the 25 April 1991 meeting held in Williamsport to discuss the issue of further off-site ground water recovery at Textron Lycoming. The two figures included in the summary are copies of overheads used in this presentation.

We request that this summary, and the preceding 1 May 1991 letter be considered as written comments on the Proposed Plan, and included in the Administrative Record for the site and be responded to as required by EPA's regulations at the appropriate time. Textron Lycoming and ERM reserve the right to make additional comments prior to the expiration of the comment period. Thank you for your continued cooperation on this project. Should you have any further questions on the attached, please feel free to call me at (215) 524-3539.

Sincerely,



Richard T. Wroblewski, P.G.  
Senior Project Manager

RTW:ms

Attachment

cc: W. Parsons, PADER  
L. Newcomer, PADER  
R. Farmerie, PADER  
L. Trefsgger, Textron Lycoming  
P. Boob, Textron Lycoming  
P. Duff, Textron, Inc.  
T. Kraig, Textron, Inc.  
T. Schuller, ERM  
R. Fender, ERM  
L. Hoose, ERM  
S. Sayko, ERM  
R. Baker, ERM

AR303447

## SUMMARY OF ERM-TEXTRON PRESENTATION 25 APRIL 1991

**Subject: Need for Additional Off-Site Ground Water Recovery at  
Textron Lycoming, Williamsport**

**Attendees:**

Larry Newcomer	PADER
Bill Parsons	PADER
Ted Loy	PADER
Thomas Schmick	PADER
Randy Farmerie	PADER
Nancy Cichowicz	EPA Region III
Lee Trefsgar	Textron Lycoming
Paul Duff	Textron, Inc.
Charles Bandoian	ERM, Inc.
Ruth Baker	ERM, Inc.
Lori Hoose	ERM, Inc.
Richard Wroblewski	ERM, Inc.
Ron Fender	ERM, Inc.

Textron Lycoming and ERM believe that the proposed on-site recovery system described in the FS needs to be installed and allowed to operate for a period of time to better determine the effectiveness of the remediation both on site and off site. Through monitoring and modeling, the effectiveness of the on-site system can be properly evaluated using actual data. The following reasons summarize why no further remediation is needed off site at present:

- The present off-site risk to ground water users is within the acceptable range because the water from the WMWA supply wells is treated. Only under hypothetical situations of untreated ground water use does any unacceptable risk exist to potential users.
- The limits of the overburden plume are well defined, and the plume has been effectively contained by the present remedial system. The plume is presently in a steady state condition, and no further deterioration of the aquifer is evident based on routine quarterly monitoring over the past two to four years.
- The on-site system will be expanded by implementing the proposed remedy. This will increase the contaminant mass removal on site, block additional off-site migration (both

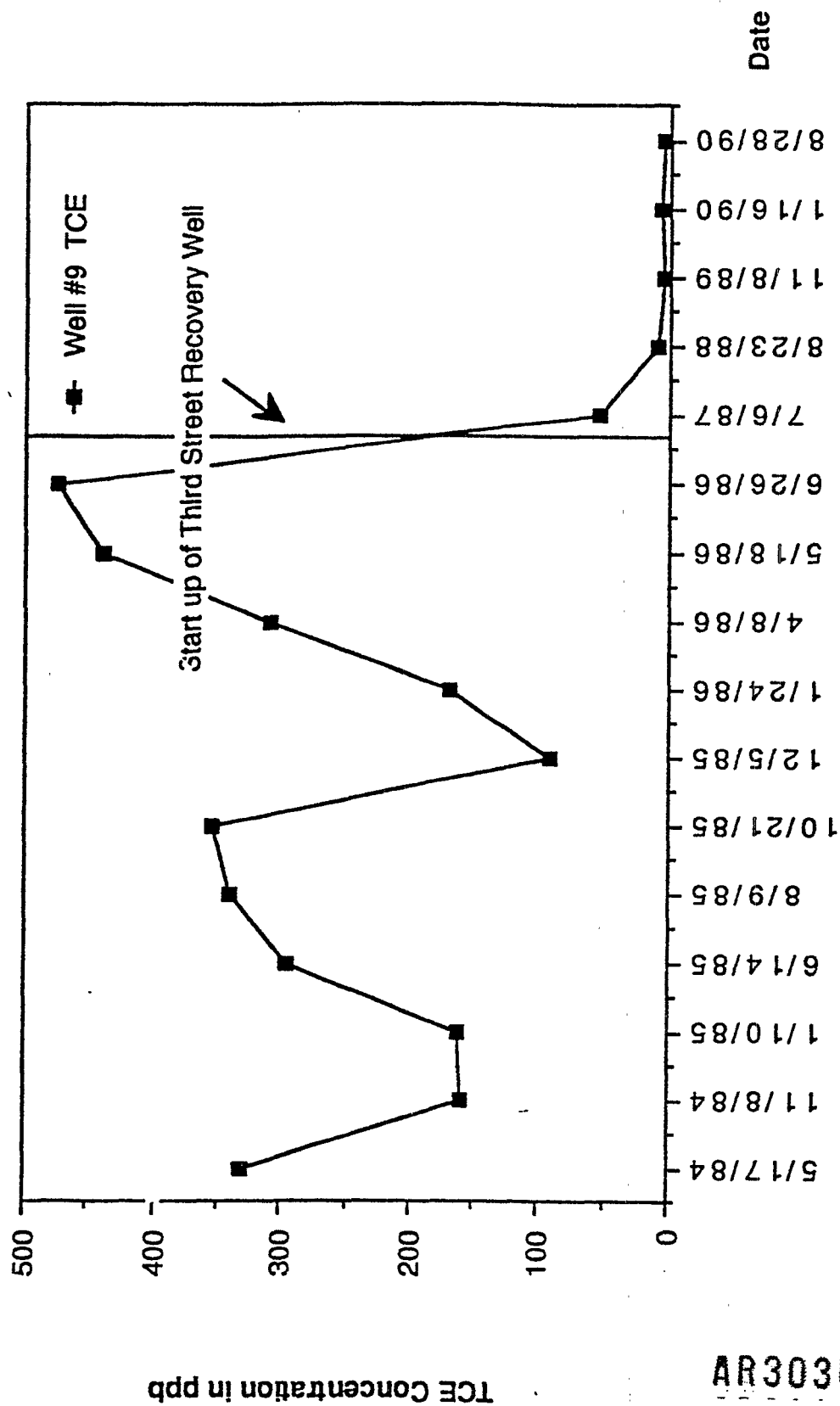
overburden and bedrock) and help to improve the effectiveness of the off-site system.

- The present off-site ground water recovery system has significantly reduced the concentrations in all of the WMWA production wells, demonstrating the effectiveness of the Third Street well as a blocking/recovery well (see Figure 1, representing VOC trends in WMWA Well No. 9). As shown in the appendices to the RI, on-site and off-site monitoring wells and the WMWA wells show decreases in contaminant concentrations since installation of the existing recovery systems.
- The overburden plume is being captured by the pumping of the Third Street Recovery Well. This was demonstrated by a two-dimensional streamline model completed by ERM. This model uses the same basic Theis assumptions as the DREAMS or RESSQ models. The model was used to demonstrate the capture area of the Third Street recovery well when this well is pumping at 500 gpm. In addition, each of the WMWA production wells was simulated in the model to pump 100 gpm, and the recharge boundary of Lycoming Creek was simulated using the image well theory to present a worst-case scenario. Figure 2 presents the modeled capture zone of the Third Street recovery well. The model demonstrated that pumping at the rate of 500 gpm, with all of the WMWA wells operating, the Third Street Recovery Well effectively captures the entire off-site overburden contaminant plume.

As discussed previously, ERM and Textron Lycoming do not concur with the position that additional off-site remediation is required. However, we do agree with the PADER that it is prudent to operate the proposed on-site recovery system for a minimum of two years and a maximum of five years to collect accurate operating data on the system. These data will be used to determine the effectiveness of the present off-site recovery system at reducing the off-site plume mass. During this time period, a ground water flow and transport model will be calibrated, run, and continually upgraded with site data to more reliably predict cleanup times and the effectiveness of the off-site recovery system. Based on these monitoring data and modeling results, the need for additional off-site recovery will be evaluated to determine if additional off-site remediation would be required and if so what the specific requirements would be.

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Figure 1  
WMWA Well #9



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Drawn By / Date:

Revised By / Date: D. Lawrence 5.10.91

Checked By / Date:

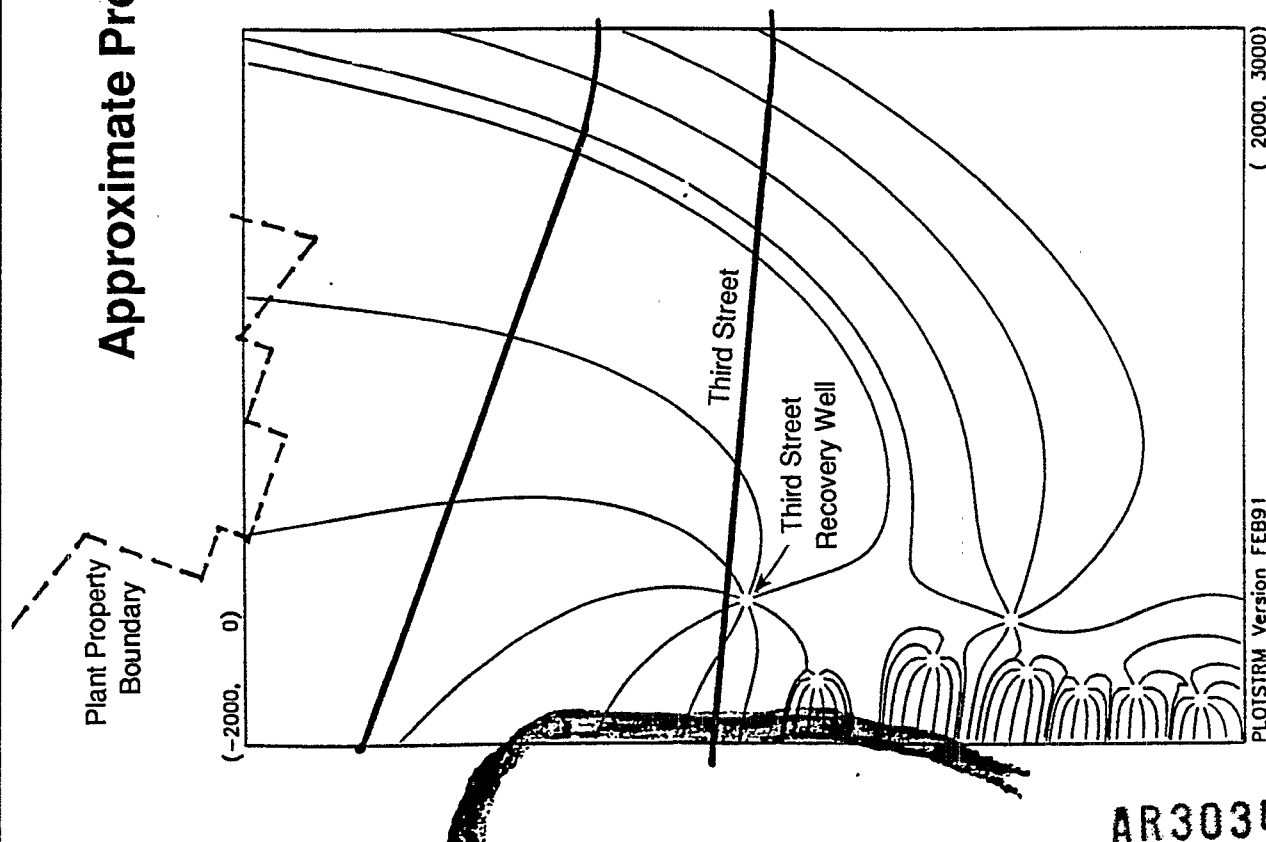
Checked By / Date: R. Wroblewski 5.10.91

Notes:



# Figure 2

## Approximate Present Conditions with Image Wells



### Model Input Parameters

Thickness =	40.0 ft	Porosity =	0.30
X-velocity =	0.200	Y-velocity =	-0.040 ft/day (v=ki)
Well No.	X(ii)	Y(ii)	Q(gpm)
1	0	600	500
2	280	260	100
3	750	350	100
4	1060	520	100
5	1120	300	100
6	1340	220	100
7	1560	220	100
8	1820	180	100
9	0	-600	-500
10	280	-260	-100
11	720	-320	-100
12	1060	-520	-100
13	1120	-300	-100
14	1340	-220	-100
15	1560	-220	-100
16	1820	-180	-100

Third St  
 NMAWA wells  
 & avg annual  
 pumping rate  
 Image wells

DRAFT

W0#

72301.01

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Revised by / Date: D. Lawrence 5.10.91

Checked by / Date:

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Notes:

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PLOTSTRM Version FEB91

